REMARKS

Reconsideration of the present application is requested. Claims 1, 18, 21 and 24 have been amended.

On April 20, 2007, the Board of Patent Appeals and Interferences (hereinafter "the Board") affirmed the rejection of claims 1-5, 14 and 16-24 as rendered obvious under 35 U.S.C. §103(a) by Bruckman (U.S. Patent Publication No. 2002/0051466), in view of Applicants' Admitted Prior Art (AAPA), and Tiedmann, Jr., et al. (U.S. Patent No. 5,914,950) and the rejection of claims 6-13 rendered obvious under 35 U.S.C. § 103(a) by Bruckman, AAPA, Tiedmann, and further in view of Buchholz (U.S. Patent No. 5,337,313).

In affirming the rejection, the Board dismissed Applicants' arguments that "puncturing," includes dropping, removing or deleting a portion of bits in the channel coded encoder packet to create a channel encoded encoder sub-packet because such a recitation was not explicit in the claims.[1] In response, Applicants amended claim 1 to recite "wherein puncturing including the moving bits from the channel coded encoder packet."[2]

The Examiner now asserts that Bruckman teaches "<u>repeating</u> the channel coded encoder packet to produce a first encoder sub-packet having a first size based on a size of the encoder packet and a first data transmission

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[1] *Ex Parte Das*, Appeal No. 2007-0843, p. 7 (BPAI Apr. 20, 2007).
[2] Such inherent support was evidenced by "Punctured Convolutional Codes of Rate (N-1)/N and Simplified Maximum Likelihood Decoding," by J. Cain et al. from 1979. This reference was submitted with Applicants previous response. The Examiner agrees with Applicants assertion of the inherent support for "puncturing," and admits that Bruckman fails to teach or suggest the claimed "puncturing." *See, e.g., Office Action* at 2.

rate at which the first encoder sub-packet is to be transmitted," as required by claim 1. The Examiner relies on the Board Decision as support for this conclusion. Applicants disagree.

The Board did not specifically address the claimed "repeating," step of claim 1, but instead merely affirmed the Examiner's allegation that "Bruckman's output fragments (i.e., sub-packets) are based *entirely on the size of the input packet when the input packet does not exceed the determined fragment size*."[3] The Board further notes that Bruckman teaches that, "the size of the fragments is based on the variable rate of transmission over the data channel."[4] On the basis of these allegations, the Board concludes that the claimed, "puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet having a first size based on a size of the encoder packet and a first data transmission rate at which the first encoder sub-packet is to be transmitted." Again, however, the Board does not explicitly address the claimed, "repeating."

To further clarify the "repeating," step in claim 1, Applicants have amended claim 1 to recite, "<u>the repeating including duplicating bits in the channel coded encoder packet</u>." Although no explicit support for such an amendment is set forth in Applicants' Specification, such an amendment is inherently supported by the well-known term "repeating," in the context of the present application.

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[3] *Ex Parte Das* at 7 (*emphasis* in original).
[4] *Id.*

As evidenced by the U.S. Patent 6,675,347 (filed prior to the filing date of the present application) and International Publication WO 99/50989 (published prior to the present application), "repeating," as interpreted by one of ordinary skill, is synonymous with duplicating.[5] Because such a term is so well-known, the amendments made herein are fully supported by "repeating," as used in Applicants' Specification.

Claims 1-5, 14 and 16-24 remain rejected under 35 U.S.C. § 103(a) in view of Bruckman (U.S. Patent Publication No. 2002/0051466, hereinafter Bruckman), in view of Applicants' Admitted Prior Art (hereinafter AAPA), and Tiedmann, Jr., et al. (U.S. Patent No. 5,914,950, hereinafter Tiedmann).

As shown in FIG. 1 of Bruckman, a transmitter includes packet sources 26, which generate streams of data packets for transmission over channel 25. The dynamic packet fragmenter 28 determines fragment sizes into which packets are to be divided.[6] When an input packet from the source 26 exceeds the determined fragment size, fragmenter 28 divides the packet for transmission into multiple fragments.[7]

Bruckman fails to teach or suggest at least, "<u>repeating</u> channel coded packets," wherein the "repeating," includes, "<u>duplicating bits in the channel coded encoder packet</u>," as now set forth in claim 1. As previously explained, Bruckman arguably discloses only fragmenting (dividing) packets into pieces based on a transmission rate over a channel 25. As the learned Examiner will

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[5] *See, e.g.,'347 Patent* at 1:61 – 1:64, *'989 Pub.* at p. 10, ll. 17-21.
[6] *Bruckman,* para. [0026], ll. 6-8.
[7] *Id.* at ll. 8-11.

surely appreciate, segmenting or fragmenting does not include repeating or duplicating bits in a code. Moreover, the mere fact that Bruckman's output fragments (i.e., sub-packets) are arguably based *entirely on the size of the input packet when the input packet does not exceed the determined fragment size,* does not teach or suggest that such input packets (or bits contained therein) are repeated or duplicated.

The Examiner correctly recognizes that Bruckman fails to teach all features set forth in claim 1, and relies upon AAPA and Tiedmann to make up for the recognized deficiencies. Neither AAPA nor Tiedmann, however, teach or fairly suggest at least, "repeating the channel coded encoder packet," wherein the "repeating," includes "duplicating bits in the channel coded encoder packet," as now set forth in claim 1. Therefore, even assuming *arguendo* the Examiner's combination could be made (which Applicants still do not admit), the combination of references fails to teach or fairly suggest all features of claim 1.

For at least the foregoing reasons, claim 1 is patentable over Bruckman, AAPA and/or Tiedmann. Claims 18, 21 and 24 are also patentable over the Examiner's combination of references for at least reasons somewhat similar to those set forth above with regard to claim 1. Claims 2-5, 14 and 18-20 and 22-23 are patentable at least by virtue of their dependency from claims 1, 18 or 21.

Claims 6-13 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Bruckman, AAPA, Tiedmann and further in view of Buchholz

(U.S. Patent No. 5,337,313). This rejection is respectfully traversed in that even assuming *arguendo* Bruckman, AAPA and/or Tiedmann could be combined with Buchholz (which Applicants do not admit for at least the reasons somewhat similar to those set forth above), Buchholz still fails to make up for at least the deficiencies of Bruckman, AAPA, and Tiedmann with respect to claim 1. Therefore, claims 6-13 are patentable over Bruckman, AAPA, Tiedmann and/or Buchholz.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-14, and 16-24 in connection with the present application is earnestly solicited.
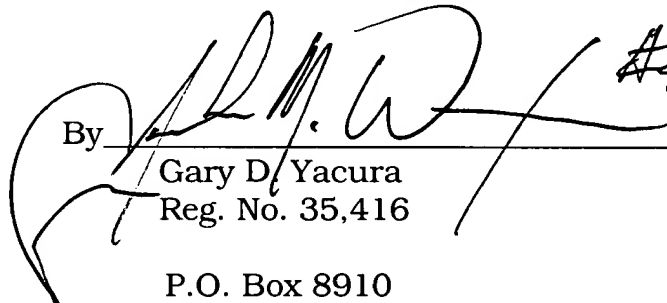
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), applicant hereby petitions for a <u>one</u> (1) month extension of time for filing a reply to the outstanding Office Action and submit the required $<u>120.00</u> extension fee herewith.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Andrew M. Waxman, Reg. No. 56,007, at the number of the undersigned listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: U.S. Patent No. 6,675,347
      International Publication No. WO 99/50989